1. (Twice amended) A transgenic mouse, the cells of which comprise at least one endogenous LXRα allele that cannot express LXRα sufficient to provide the capacity to respond to dietary cholesterol.

2. (Twice amended) The transgenic mouse of claim 1, wherein said cells comprise two endogenous LXRα alleles that cannot express LXRα sufficient to provide the capacity to respond to dietary cholesterol.

4. (Twice amended) The transgenic mouse of claim 1, wherein a transcript produced from said endogenous LXRα allele contains an interruption in the LXRα coding sequence.

5. (Twice amended) The transgenic mouse of claim 2, wherein a transcript produced from said endogenous LXRα alleles both contain an interruption in the LXRα coding sequences.

21. (Twice amended) A method for screening a candidate substance for the ability to reduce cholesterol levels in a mammal comprising:

(a) providing a transgenic mouse, the cells of which comprise at least one endogenous LXRα allele that cannot express LXRα sufficient to provide the capacity to respond to dietary cholesterol;

(b) treating said mouse with said candidate substance; and

(c) monitoring a cholesterol-related phenotype in said mouse,

wherein a reduction in said cholesterol-related phenotype in said mouse treated with said candidate substance, as compared to a similar mouse not treated with said candidate substance, indicates that said candidate substance reduces cholesterol levels.

23. (Amended) The method of claim 21, wherein said phenotype is cholesterol absorption, circulating cholesterol, hepatic cholesterol, hepatomegaly, atherosclerosis, cardiac failure, cardiac (atrophy/hypertrophy), activity level, survival, cancer, reproduction, immune function, skin disease, cognitive function, and adrenal function.

26. (Twice amended) The method of claim 21, wherein said cells comprise two endogenous LXRα alleles that cannot express LXRα sufficient to provide the capacity to respond to dietary cholesterol.

27. (Twice amended) A method for screening a candidate substance for the ability to increase bile acid synthesis in a mammal comprising:

(a) providing a transgenic mouse, the cells of which comprise at least one endogenous LXRα allele that cannot express LXRα sufficient to provide the capacity to respond to dietary cholesterol;

(b) treating said mouse with said candidate substance; and

(c) monitoring a bile acid-related phenotype in said mouse,

wherein an increase in said bile acid-related phenotype in said mouse treated with said candidate substance, as compared to a similar mouse not treated with said candidate substance, indicates that said candidate substance increases bile acid synthesis.

44. (Twice amended) A transgenic mouse cell which comprises at least one endogenous LXRα allele that cannot express LXRα sufficient to provide the capacity to respond to dietary cholesterol.

45. (Twice amended) The transgenic cell of claim 44, wherein said cell comprises two endogenous LXRα alleles that cannot express LXRα sufficient to provide the capacity to respond to dietary cholesterol.